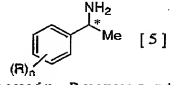
WHAT IS CLAIMED IS:

1. A process for producing an optically active 1-(fluoro- or trifluoromethyl-substituted phenyl)ethylamine represented by the general formula [5]:

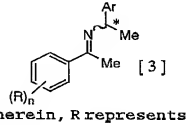
[Chemical 3]



[5]

(wherein, R represents a fluorine atom or trifluoromethyl group, n represents 1 to 5, and it takes an arbitrary substitution position, except for the ortho position when R is a fluorine atom and n is 1, and the asterisk (*) represents a chiral carbon) by asymmetrically reducing an optically active imine represented by the general formula [3]:

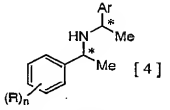
[Chemical 1]



[3]

(wherein, R represents a fluorine atom or trifluoromethyl group, n represents 1 to 5 and it takes an arbitary substitution position, except for the ortho position when R is a fluorine atom and n is 1, Ar represents a phenyl group or 1- or 2-naphthyl group, and the asterisk (*) represents a chiral carbon) using a hydride reducing agent, converting to an optically active secondary amine represented by the general formula [4]:

[Chemical 2]



[4]

(wherein, R represents a fluorine atom or trifluoromethyl group, n represents 1 to 5 and it takes an arbitrary substitution position, except for the ortho position when R is a fluorine atom and n is 1, Ar represents a phenyl group or 1- or 2-naphthyl group, and the asterisks (*) represent chiral carbons), and subjecting the secondary amine, its salt of an inorganic acid or its salt of an organic acid to hydrogenolysis.

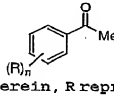
2. The production process according to claim 1, wherein the hydride reducing agent is sodium borohydride.

3. The production process according to claim 1, wherein the inorganic acid or organic acid comprises hydrochloric acid, hydrobromic acid, phthalic acid, benzenesulfonic acid, p-toluenesulfonic acid or optically active mandelic acid.

4. The production process according to claim 1, wherein hydrogenolysis is carried out while heating at 40°C or higher using a group VIII metal catalyst at 0.5 wt% or less when converted as metal in a hydrogen atmosphere of 2 MPa or lower.

5. The production process according to claim 1, wherein the opticall active imine represented by the general formula [3] is an optically active imine obtained by dehydration and condensation under acidic conditions of a fluoro- or trifluoromethyl-substituted phenylmethyl ketone represented by the general formula [1]:

[Chemical 4]



[1]

(wherein, R represents a fluorine atom or trifluoromethyl group, n represents 1 to 5, and it takes an arbitrary substitution position, except for the ortho position when R is a fluorine atom and n is 1), and an optically active primary amine represented by the general formula [2]:

[Chemical 5]

[2]

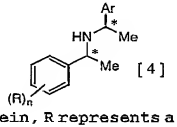
(wherein, Ar represents a phenyl group or 1- or 2-naphthyl group, and the asterisk (*) represents a chiral carbon).

6. The production process according to claim 1, wherein stereochemistry of the compound represented by the general formula [3], [4] or [5] is R form or S form.

7. The production process according to claim 5, wherein stereochemistry of the compound represented by the general formula [2] is R form or S form.

8. A purification process, characterized in that an optically active secondary amine represented by the general formula [4]:

[Chemical 6]



[4]

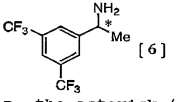
(wherein, R represents a fluorine atom or trifluoromethyl group, n represents 1 to 5 and it takes an arbitrary substitution position, except for the ortho position when R is a fluorine atom and n is 1, Ar represents a phenyl group or 1- or 2-naphthyl group, and the asterisks (*) represent chiral carbons) is converted to a salt of an inorganic acid or organic acid, followed by purification by recrystallization.

9. The purification process according to claim 8, wherein the inorganic acid or organic acid comprises hydrochloric acid, hydrobromic acid, phthalic acid, benzenesulfonic acid, p-toluenesulfonic acid or optically active mandelic acid.

10. A purification process, characterized in that an optically

active 1-(3,5-bis-trifluoromethylphenyl)ethylamine represented by the formula [6]:

[Chemical 7]



[6]

(wherein, the asterisk (*) represents a chiral carbon) is convered to a salt of an inorganic acid or organic acid, followed by purification by recrystallization.

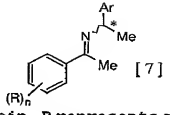
11. The purification process according to claim 10, wherein the organic acid comprises p-toluenesulfonic acid, optically active mandelic acid or optically active tartaric acid.

12. The purification process according to claim 8, wherein stereochemistry of the compound represented by the general formula [4] is R form or S form.

13. The purification process according to claim 10, wherein stereochemistry of the compound represented by the formula [6] is R form or S form.

14. An optically active imine represented by the general formula [7]:

[Chemical 8]

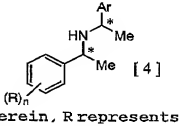


[7]

(wherein, R represents a fluorine atom or trifluoromethyl group, n represents 1 to 5 and it takes an arbitrary substitution position, except for the ortho position and the para position when R is a fluorine atom and n is 1, Ar represents a phenyl group or 1- or 2-naphthyl group, and the asterisk (*) represents a chiral carbon).

15. An optically active secondary amine represented by the general formula [4]:

[Chemical 9]



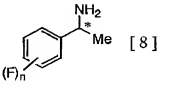
[4]

(wherein, R represents a fluorine atom or trifluoromethyl group, n represents 1 to 5 and it takes an arbitrary substitution position, except for the ortho position when R is a fluorine atom and n is 1, Ar represents a phenyl group or 1- or 2-naphthyl group, and the asterisks (*) represent chiral carbons).

16. An optically active 1-(fluoro-substituted

phenyl)ethylamine represented by the general formula [8]:

[Chemical 10]

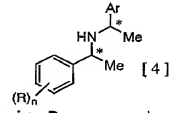


[8]

(wherein, n represents 1 to 5 and it takes an arbitrary substitution position, except for the ortho position and the para position when n is 1, and the asterisk (*) represents a chiral carbon).

17. An inorganic or organic acid salt of an optically active secondary amine represented by the general formula [4]:

[Chemical 11]



[4]

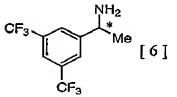
(wherein, R represents a fluorine atom or trifluoromethyl group, n represents 1 to 5 and it takes an arbitrary substitution position, except for the ortho position when R is a fluorine atom and n is 1, Ar represents a phenyl group or 1- or 2-naphthyl group, and the asterisks (*) represent chiral carbons).

18. The salt according to claim 17, wherein the inorganic acid or organic acid comprises hydrochloric acid, hydrobromic acid, phthalic acid, benzenesulfonic acid, p-toluenesulfonic acid or

optically active mandelic acid.

19. An inorganic or organic acid salt of an optically active 1-(3,5-bis-trifluoromethylphenyl)ethylamine represented by the formula [6]:

[Chemical 12]



[6]

(wherein, the asterisk (*) represents a chiral carbon).

20. The salt according to claim 19, wherein the organic acid comprises p-toluenesulfonic acid, optically active mandelic acid or optically active tartaric acid.

21. The compound according to claim 14, wherein stereochemistry of the compound represented by the general formula [7] is R form or S form.

22. The compound according to claim 15, wherein stereochemistry of the compound represented by the general formula [4] is R form or S form.

23. The compound according to claim 16, wherein stereochemistry

of the compound represented by the general formula [8] is R form or S form.

28. The compound according to claim 19, wherein stereochemistry of the compound represented by the formula [6] is R form or S form.